

Polyethylene

NAV159

Post-Industrial Recyclate



Accelerating Action
on Circularity

Description

NAV159 is a polyethylene post-industrial recyclate (rPE) supplied in different colours in pellet form for injection moulding applications. This product is an ideal PE used where sustainability and circularity matter. It is a post-industrial recyclate consisting of post-industrial waste coming from Borealis plants. It is not intended for use in food contact, potable water contact, pharmaceutical and medical applications. Due to the nature of recyclates, some variation in colour can be observed between batches.

Cas No. 9002-88-4

Typical characteristics

NAV159 can be described with following typical characteristics:

Low Odour

Available in homogenised 24-ton truckloads

Good stiffness/impact balance

Filtration: 100 µm

- Available in the following colours:

- Natural -1
- Black -2 (includes black colour masterbatch)
- Grey -3

Applications

NAV159 is intended for following applications:

Injection moulding applications.

Physical properties

Property	Typical value *	Unit	Test method
Density	0.950	g/cm ³	ISO 1183-1
Melt flow rate (190 °C/5 kg)	6-10	g/10 min	ISO 1133-1
Bulk density	540	g/l	ISO 60
Moisture content ¹	≤ 0,05	%	
Tensile modulus (1 mm/min)	850	MPa	ISO 527-2
Tensile strain at break (50 mm/min)	80	%	ISO 527-2
Charpy impact strength, notched (23 °C)	6.5	kJ/m ²	ISO 179-1/1eA

¹ internal method

* Data should not be used for specification work

Processing techniques

This product is easy to process with standard extrusion conditions.

Following parameters should be used as guideline:

Processing setting	Typical value/range
Melt temperature	170 - 200 °C
Holding pressure ²	200 - 500 bar
Mould temperature	30 - 40 °C

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² Minimum to avoid sink marks.

Shrinkage 1 - 2%, depending on wall thickness and moulding parameters

Packaging and storage

NAV159 should be stored in dry conditions at temperatures below 50°C and protected from UV-light. Improper storage can initiate degradation, which can result in odour generation and colour changes and can have negative effects on the physical properties of this product.

Product compliance documents

Latest versions of product safety information sheets (PSIS), product safety data sheets (SDS) and other product liability documents are available in our website www.borealisgroup.com.

Sustainability aspects

Borealis is ever mindful of the impact of our products on the planet. We promote Design for Circularity (DfC) and Design for Recycling (DfR) to conserve natural resources and to reduce the environmental impact of products over their entire lifetime (including production, use phase and after phase). DfR helps ensure that material can be effectively recycled while maximizing the material performance efficiency.

Further information on sustainability and Design for Recycling (DfR) can be found from our websites www.borealisgroup.com and www.borealiseverminds.com.

Disclaimer

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